

CLAIMS

WE CLAIM:

1. In a wireless communication system adapted for packet data transmissions, the system having at least one mobile station with pending data at a transmitter, a method comprising:
 - 4 calculating a packet delay time for a first receiver of the at least one mobile station with pending data;
 - 6 comparing the packet delay time to a first threshold;
 - 8 if the packet delay time violates the first threshold, calculating a first delay term;
 - 10 calculating a priority function for the first receiver using the first delay term; and
 - 12 scheduling transmissions to the receiver according to the priority function.
2. The method of claim 1, wherein the packet delay time is calculated as:
 $g(d)=k$ for packet delay time greater than the first threshold.
3. The method of claim 1, wherein the packet delay time is calculated as:
 $g(d)=DRC_{MAX}/DRC_{AVE}$ for packet delay time greater than the first threshold, wherein DRC_{MAX} is a maximum of DRC values for receivers in an active set of the transmitter, and wherein DRC_{AVE} is an average DRC value for the first receiver.
4. In a wireless communication system adapted for packet data transmissions, a method comprising:
 - 2 identifying a user having a packet delay higher than a threshold; and
 - 4 adjusting the priority of the user while the packet delay is higher than the threshold.